QUALITY CONTROL PLAN

INSTALLATION RESTORATION (IR) SITE 08, NUSC DISPOSAL AREA SOIL REMOVAL ACTION
NAVAL UNDERSEA WARFARE CENTER, MIDDLETOWN, RHODE ISLAND

CONTRACT NO: N62472-01-D-0807 DELIVERY ORDER 0006

Prepared for:
Naval Facilities Engineering Command
EFA Northeast
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This Quality Control (QC) Plan was prepared for the Naval Facilities Engineering Command, EFA Northeast. The QC Plan is submitted in fulfillment of the Scope of Work (SOW) under Contract N62472-01-D-0807, Delivery Order 0006, Specification Section 01450N, Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, Rhode Island.

This document will serve as a guide for assuring that T N & Associates, Inc.'s (TN&A's) construction and administrative practices meet standards of performance for construction activities associated with Contract N62472-01-D-0807, Delivery Order 0006, Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center. It is an acknowledgement by TN&A and its staff, that quality control (QC) is an integral part of all projects. The QC Plan contains the methods and procedures that will be followed by TN&A for all work performed either by TN&A or its subcontractors.

The basis for this QC program is the U. S. Army Corps of Engineers three-phase quality control program. All work performed by TN&A or its subcontractors will comply with the applicable specifications, drawings, and standards with respect to the contractor-furnished equipment, materials, workmanship, construction, demolition, abatement, finish, functional performance, and identification.

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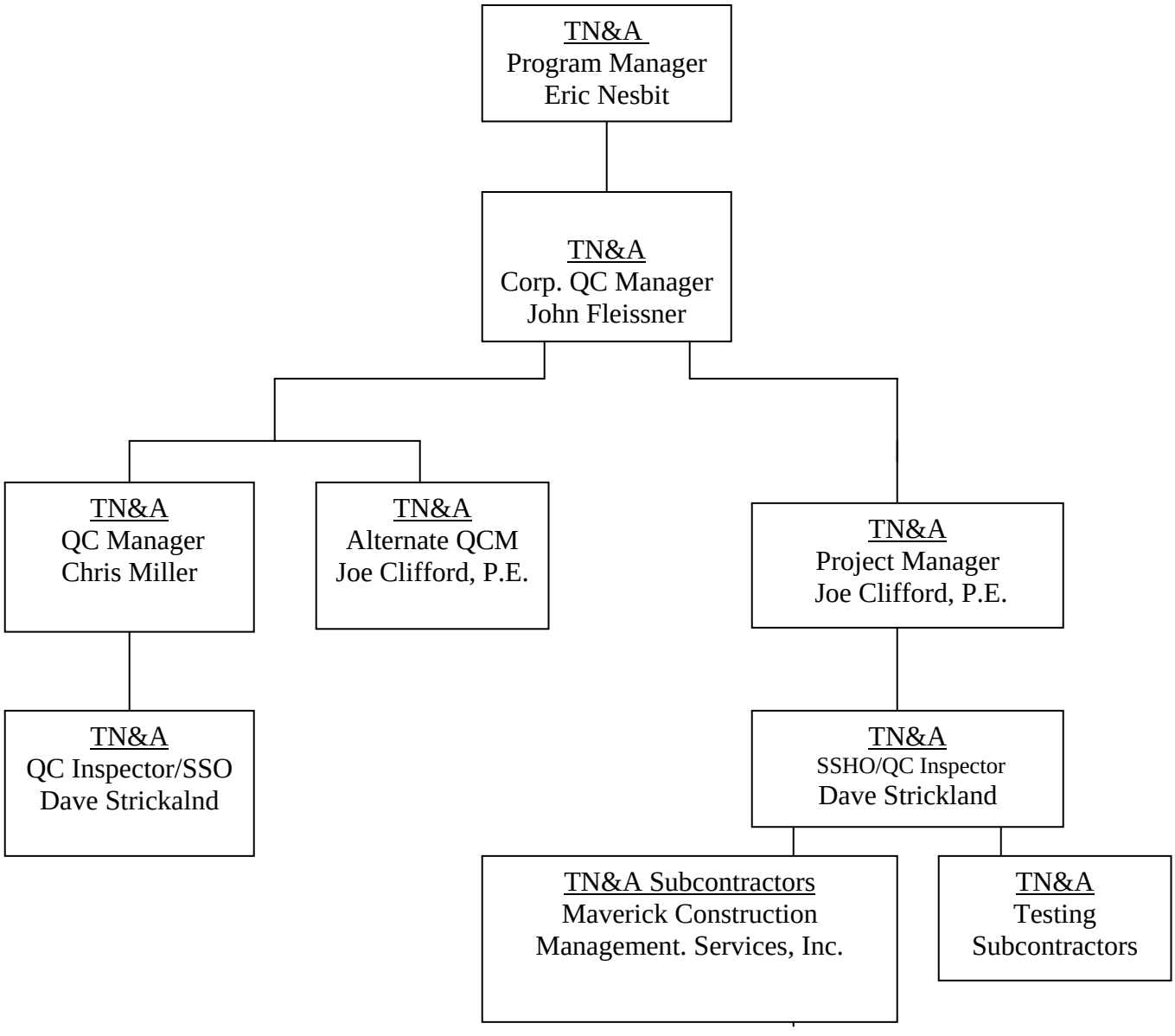
I. QC Organization

The QC Organization Chart (Figure 1-1) specifically identifies the project participants and lines of communication. The organization is structured to ensure that there are sufficient QC personnel with adequate authority to satisfy all contract requirements. The achievement of quality in project activities is the responsibility of all TN&A personnel and subcontractors participating on the project.

Figure 1-1
Project Organization Chart
IR Site 08 – NUSC Disposal Area Soil Removal Action,
Naval Undersea Warfare Center, Middletown, RI



II. Names and Qualifications of QC Personnel

The names and qualifications of the designated Quality Control Manager (QCM) and alternate QCM are listed in the following resumes. Because of the nature and level of complexity of the project, the QCM and alternate will have other job functions in addition to their construction QC duties. The QCM is the lead on-site person whose level of knowledge and experience qualifies them to determine whether the "work" is being performed in compliance with the project plans and specifications. The alternate QCM is also an individual whose level of knowledge and experience qualifies them to determine whether the "work" is being performed in compliance with the project plans and specifications.

III. Duties, Responsibility, and Authority of QC Personnel

A. Quality Control Manager

The QCM for the Project is Chris Miller. The QCM implements and manages the QC program. The QCM attends the coordination and mutual understanding meeting and conducts the QC meetings. Additionally, the QCM will perform the three phases of Quality Control, perform submittal approval, ensure testing is performed as necessary, and provide any QC certifications and documentation required in the contract. The QCM is responsible for managing and coordinating the three phases of control and documentation performed by Testing Laboratory personnel and any other testing and inspection personnel required by this contract. A copy of Mr. Miller's USACE CQC training Certificate is included in Appendix C.

B. Alternate Quality Control Manager

The Alternate QCM is Joe Clifford. The Alternate QCM serves only in the designated QCM's absence for a maximum of two weeks at a time, and for not more than a total of 30 days. When the QCM is not available, the Alternate QCM implements and manages the QC program. The Alternate QCM attends the coordination and mutual understanding meeting and conducts the QC meetings in the QCM's absence. Additionally, in the QCM's absence, the Alternate QCM will perform the three phases of Quality Control, perform submittal review and approval, ensure testing is performed as necessary, and provide any QC certifications and documentation required in the contract. The Alternate QCM is responsible for managing and coordinating the three phases of control and documentation performed by Testing Laboratory personnel and any other testing and

inspection personnel required by this contract at those times when the QCM is unable to perform those roles.

C. Quality Control Inspector

The full time onsite Quality Control Inspector is Dave Strickland. The QC Inspector assists the CQM with the implementation and management of the QC program. The QC Inspector may also attend the coordination and mutual understanding meeting and will assist with the conduction of the required QC meetings. The QC Inspector will be the "eyes and ears" of the CQM in the field. Additionally, the QC Inspector may assist the QCM with the performance of the three phases of Quality Control, prepare submittals, ensure testing is performed as necessary, and provide any QC certifications and documentation required in the contract. A copy of Mr. Strickland's USACE CQC Training Certificate is included in Appendix C.

Resumes of the key team members are provided below.

ERIC NESBIT, P.E. – PROGRAM MANAGER

Education

MS, Environmental Engineering, Stanford University, 1994
BSE, Civil Engineering, Duke University School of Engineering, 1993

Registrations/Certifications

Registered Professional Civil Engineer, CA, NC
Certified Quality Control Manager
Level II DAWIA Certified

Relevant Experience and Qualifications

Mr. Nesbit is an accomplished project engineer and construction manager. He has proven expertise in executing construction and remediation projects within budget and on schedule. Professional experience includes the following.

Project Manager, HTRW Program, Seymour Johnson AFB, NC.

Manages the Long Term Operation and Monitoring of two Groundwater Treatment Plants. The treatment technology includes free product interception trench and skimmer pumps, 38 vapor extraction wells, 21 groundwater recovery wells, oil water separators, dual phase vapor extraction, tray air strippers and vapor phase carbon filters. Long Term Operation and Monitoring includes system Optimization, Groundwater and Process Sampling, Regulatory and Community interaction.

Project Manager, PRAC, Design/Build/Operate SS-12 Treatment Plant, Seymour Johnson AFB, NC.

Manages the Remedial Design, and Remedial action to design/build a new Groundwater Treatment Plant at SS-12 on the flight line to recover a 50,000 gallon LNAPL Jet Fuel Plume and treat contaminated groundwater. The system includes a combination of active and passive plume interception trenches and LNAPL skimmers, and a field of Air-Sparge wells to increase bioremediation. TN&A operates and monitors this plant to assure that remediation goals are met.

Project Manager, USA Petroleum UST Removal and Remediation Project, Goldsboro NC.

Lead the accelerated schedule efforts to upgrade four 12,000-gallon gas and diesel underground tanks at a commercial Gas Station in Goldsboro, NC. Rapid response and performance were critical to our customer and the TN&A lead team performed an entire station upgrade including new tanks, fuel Piping, leak detection, new dispensers, site concrete and landscaping in a 45 day performance period from mobilization to new station start up. During the tank removal contaminated soil was discovered and TN&A quickly responded by screening, excavating, sampling and properly disposing of 1397 Tons of TPH impacted soil and all required excavation sampling for reporting. Mr. Nesbit then prepared all site closure report documentation and coordinated with state regulators for facility closure.

Deputy Resident Officer in Charge of Construction, Naval Weapons Station, Concord, CA

Responsibilities included construction manager, project engineer, and office manager. Supervised nine construction managers, engineers, and contracting officers; managed $54 million in construction projects. Generated net profit of $1.3M, with the highest Work in Place per employee in the region.

Served on the Contractor Selection Boards and was Contracting Officer for numerous contract awards, including Technical Evaluator for a 5-year, $250M Facilities Maintenance contract. Conducted detailed design reviews, prepared government estimates and pre-negotiation positions, conducted negotiations and contract awards.

Solved complex technical and construction issues. Took over a severely delayed $4.3M project, solved design, production, and coordination problems, and expedited completion and eliminated a $1.5M claim, settled for $440K.

Negotiated modifications, avoided impacts, and expedited completion. Completed 9 of 12 remediation projects ahead of schedule; 8 of 12 under original award amount.

Implemented a value engineering solution in challenging negotiations with a local water district, saving $900K.

Plant Engineer, Environmental Director, and Vehicle Manager, Naval Medical Center, Oakland, CA

Supervised 51 people and managed $20M annually. Managed divisions for facilities housing, environmental, communications, vehicles, and retail stores.

Led cleanup and closure of a 51-building, 2-million square foot hospital.

Planned and managed over 200 construction, repair, and demolition projects; coordinated around a working hospital schedule.

Negotiated with city officials, federal and state regulators, community and environmental actions groups. Resolved an environmental lawsuit against the Navy, citing over 3,600 violations; serving as the Navy's lead technical negotiator with no resulting fines or payments.

JOSEPH CLIFFORD, P.E. – PROJECT MANAGER

Education

MS, Civil Engineering, Lehigh University, Bethlehem, PA, 1989

BS, Civil Engineering, Lehigh University, Bethlehem, PA, 1984

Registrations/Certifications

Registered Professional Engineer, PA and NJ

UST Removal/Installation and Subsurface Evaluator Certification, NJ

Relevant Experience and Qualifications

Mr. Clifford has more than 20 years of environmental consulting and remediation experience working for various private and public sector industries.

Construction/Project Manager, TN & Associates, Inc., Raleigh, NC

Project Manger for the $0.9M Earle Naval Weapons Station Site 13 Landfill Cap Project in Colts Neck, NJ. Project involves design and construction of a 1.9 acre landfill cap, sediment excavation, and wetland restoration.

Project Manager for the $5M Tongue Point Landfill Remedial Action Project in Astoria, OR. This FUDs project includes installation of a 3-acre landfill cap, 60-foot deep slurry wall, and a LNAPL recovery and treatment system.

Construction Manager for the Nascolite Corporation Superfund Site in Millville, NJ. Responsible for the overall implementation of the $15M remediation project including management of up to 40 field staff, liaison with the USACE and USEPA, resource scheduling and reporting.

Project Manager for the $1.2M Greene Lane Housing Demolition Project at the Newport Naval Station in Newport, RI. Project included lead/asbestos abatement, removal of 94 housing units and associated roadway and parking areas.

Construction Manager, Clifford Environmental, Inc., West Chester, PA

Construction manager for a $2.5M site demolition and cleanup project at a chemical warehouse destroyed by fire. Project included development of extensive demolition, asbestos abatement and remedial action work plans for the 12 buildings and sewer systems impacted by stored chemicals.

Remedial design support and construction manager for a leachate collection system upgrade at a closed landfill. Project included design and installation of 8 individual pump/collection manholes, force main, above-ground tanks, and a fully-automated PLC monitoring and control system.

Remedial design support and construction manager for a landfill subsidence repair project. A design-build approach was developed that used field test pitting to determine the exact extents of the existing HDPE 40-mil liner under tension.

Principal Engineer, ATOFINA Chemicals, Inc., Philadelphia, PA.

As a project manager for a chemical company's corporate remediation group, was directly responsible for managing and coordinating all technical and administrative aspects for more than $20M in remedial project reserves at numerous chemical plant facilities, both active and orphaned. Key projects included management of:

A $9M remedial action at a Superfund site in western PA. The project consisted of an 18-acre RCRA cap, 50-gpm leachate-groundwater extraction and treatment system to remove pesticides, and restoration of the township park.

An $8M divestiture/remediation/closure of a mining operation (six mills, numerous mine sites, and associated tailings ponds in Kentucky and Illinois. Tailings pond closures required extensive regrading of over 100,000 cy of soils to restore slope stability.

A $1.2M earthen lined lagoon closure and wastewater treatment system improvement at an active manufacturing facility in South Carolina. Project included use of holding tanks and screeners to allow recovery/recycling of product during closure. The final lagoon was double-lined with an integral leak detection system.

Principal Engineer, Roux Associates, Inc., West Deptford, NJ

As an engineering manager/principal engineer, developed engineering design and remediation capabilities. Responsible for P&L and managed a staff of 15 in engineering and ACAD groups. Key projects included:

Project manager for a $15M RCRA facility investigation and corrective action project at a chemical manufacturing facility. Project included IRMs for multiple SWMUs as follow: design and installation of a perimeter groundwater extraction system; LNAPL recovery system; insitu bioremediation system; and process sewer rehabilitation.

Principal engineer and a member of a multiconsultant remedial team for a former PCB production facility undergoing a RCRA facility investigation and corrective measure program. Project included multiple phases of design and/or construction of landfill caps, asphalt caps, building decontamination, detention basins.

Principal-in-charge of investigation, design, permitting, and installation of over 20 remediation projects involving groundwater extraction and treatment, separate-phase product recovery, soil source excavation, SVE, air sparging, soil washing, capping, and landfill closure.

CHRISTOPHER MILLER – CQC MANAGER

Education

BS, Environmental Science, Drexel University, Philadelphia PA, 1990

Registrations/Certifications

40-hour HAZWOPER, 8-Hour HAZWOPER Supervisor

Construction Quality Management (CQC), U.S. Army Corps of Engineers

Hazardous Waste Shipping & Handling, DOT HM-181

Nuclear Testing Equipment Operation, Troxler Electronics Labs

Health & Safety Officer Training for Hazardous Waste Site Remediation

Certified Sampler Training (Chemical Waste Manager)

CPR and First Aid

Relevant Experience and Qualifications

Mr. Miller has extensive experience in project management, quality, control, and health and safety on remedial projects involving waste excavation, building decontamination and demolition, drum removal, asbestos abatement, UST and AST removal and demolition, thermal treatment of contaminated soils, wastewater handling and treatment, construction, operation and maintenance of groundwater treatment systems, and landfill closure projects. He is also experienced at operating a broad range of light and heavy

construction equipment, and is adept at software programs such as Word Perfect, Microsoft Office including Word, Excel, and Project, Suretrak, Project Manager, and Windows 95/98/2000.

Construction Quality Control Manager, TN & Associates, Inc., Raleigh, NC

Currently functioning as Construction Quality Control Manager assigned to the Langley Air Force Base Sanitary Sewer Project in Hampton, VA. The Scope of the project involves the restoration and replacement of portions of the sanitary sewer system that runs through a heavily populated portion of Langley Air Force Base. Non-rehabilitatable portions of the sewer system are being replaced in whole with new piping and manholes and other areas are being rehabilitated using in-situ liners for manholes and piping. Several of the piping runs travel through IR Sites and petroleum contaminated soils and groundwater are present. In addition to excavation, replacement and rehab, portions of the sewer system are being replaced via pipe reaming, which is a trenchless piping technology that utilizes the existing pipeline as the borehole for a directional drilling rig, which reams out the old pipe and pulls in new piping. This $3.2M project is being managed for the Air Force by the USACE Norfolk District.

Mr. Miller also functioned as the CQC Manager for the recently completed project for the Navy under the current Contract. The project (December 2003 to May 2004) was the Greene Lane Housing Demolition Project at the Naval Station Newport, Newport, RI. Mr. Miller prepared the CQC Plan, Work Plans and HASP for the project involving asbestos abatement, lead paint abatement and demolition of an inactive section of a Naval Housing Development. Mr. Miller is responsible for implementation and enforcement of the Work Plans, CQC Plan and HSAP while providing oversight on specialty subcontractors. Also responsible for assurance that proper project record documents are prepared and maintained and that the USACE 3-Phase Quality Control system is implemented and enforced.

Mr. Miller was the CQC Manager at the Nascolite Corporation Superfund Site in Millville, New Jersey. He was responsible for implementation and enforcement of the Constriction Quality Control Plan prepared for the project, ensured that all work was performed in compliance with the requirements set for the CQC Plan, Contract Drawings and Specifications and in accords with the US Army Corps of Engineers 3-Phase Inspection Process.

PROJECT MANAGER, PANTHER TECHNOLOGIES, MEDFORD, NJ (9/02 THRU 4/03)

Managed various environmental construction and remediation projects. Attended pre-bid meetings, prepared cost estimates and proposals, executed contracts, and wrote and executed work plans, safety plans, and other project-specific documents. Managed field crews and scheduled personnel, equipment, and materials, including a project in downtown Washington, DC where construction equipment had to be lifted onto a former

railroad overpass with a crane. Primary point of contact for client and owner representatives. Negotiated change orders and contracts for subcontractors, vendors and suppliers. Processed all project-related paperwork, prepared invoices, and handled project record documents and correspondence.

Pinelands Park Landfill, Egg Harbor Township, NJ: Project Manager for three projects supervised by Golder Associates. One involved the repair of a 30,000-sf slope failure of the landfill cap, including removal and replacement of cap constituents in failure area (clay, drainage layer sand, topsoil and drainage piping) and reinstallation of a methane extraction well encasement and piping that separated from the well during the slope failure. Responsible for preparation of the cost estimate and proposal for the slope failure portion of the work.

Crystal Point Yacht Club, Point Pleasant, NJ: Project Manager for all phases of project, from bidding and proposal preparation to execution of the work. Prepared cost estimate and proposal without the benefit of project specifications or clear objective from the engineer. Prepared project-specific scope within text of technical proposal. Project involved the surgical excavation of 1,500 tons of petroleum-impacted soils underlying the parking lot adjacent to the bulkhead of the marina on the Manasquan River.

Mandarin Oriental Hotel Site, SW Washington, DC: Project manager responsible for estimating, cost and technical proposal preparation and successful execution of project in downtown Washington DC that involved excavation and load-out of 130 tons of lead-impacted soils from underneath an old railroad overpass that crosses a busy city street.

Kaydon Ring and Seal Facility, Baltimore, MD: Project manager responsible for all phases of project from bidding and preparation of technical proposal through successful completion. Project involved the excavation and repair of an underground leaking water line in an area of known soil contamination under the sidewalk and driveway of an active production facility. Water line had been bisected with a monitoring well. The area was cut open, dug out and new piping was installed around the well. The concrete and asphalt were restored.

RPI Factory Lane Site, Peripheral Properties, Middlesex, NJ: Project manager responsible for project from bidding and technical proposal preparation through completion. Project involved surgical excavation and off-site disposal of arsenic-contaminated soils from commercial properties. Work had to be conducted with no interruption to the businesses. Scope involved the excavation of existing soils, installation of a soil and geotextile cap, and re-establishment of landscaping. Scheduled personnel, equipment and materials, performed construction layout, checked excavation/backfill grades and prepared all required contract documents and submittals.

Assistant Project Manager and Project Engineer, ENVIROCON, Inc., Aston, PA (December 2000 to September 2002)

Assistant Project Manager/Superintendent on a 52-acre landfill closure project. Responsible for daily management and execution of project activities involving the excavation and relocation of 140,000 cy of landfill waste, excavation of three onsite percolation basins and installation/placement of 72,000 cubic yard clean soils cap covered with 36,00 cubic yards of topsoil. Prepared and updated the construction schedule, and administered progress meetings and all project-required submittals.

Also functioned as the project engineer on a project involving the surgical excavation of contaminated soils from a former manufacturing facility. Project involved the installation of concrete cutoff walls in drainage ditches, removal and reinstallation of railroad sidings, installation of geosynthetic liner systems, installation of fabric formed revetment, and reconstruction of drainage ditches in railroad right of ways.

Project Manager and QA/QC Manager, Sevenson Environmental Services, Inc., Chadds Ford, PA (December 1995 to December 2000)

Project manager for long-term remedial action (LTRA) contract with the U.S. Army Corps of Engineers for Operation and Maintenance of USEPA Region 2 (New York and New Jersey) Superfund Sites. Initiated activities under the eight consecutive Task Orders under this 5-year, $14M USACE Kansas City District PRAC contract. Managed four groundwater treatment facilities at Superfund sites, one of which was operating under a cost reimbursable contract.

Also served as the Project Quality Control Manager on other projects responsible for development and implementation of project work plans, inspection and conformance testing to ensure compliance with project plans and specifications, and coordination and interfacing with project management teams and client representatives. Also responsible for project and task estimating as well as specification and plan review and bid preparation and submission.

QA/QC and Health and Safety Manager, RUST Remedial Services, Inc., Bensalem, PA (September 1992 to December 1994)

Responsible for daily onsite management of a wide variety of remedial construction projects. Duties included development and implementation of work, quality control, and health and safety plans. Also secured and managed subcontractors, monitored and inspected work for compliance with project specifications, and ensured adherence to site health and safe requirements.

QA/QC and Health and Safety Manager, Chemical Waste Management, Inc., Princeton, NJ (June 1990 to September 1992)

Responsible for daily onsite management of a wide variety of remedial construction projects. Duties included development and implementation of work, quality control and health and safety plans, securing and managing subcontractors, monitoring and inspecting work for compliance with project specifications, and ensuring adherence to site health and safety requirements.

Site Safety Officer, Rollins Environmental Services, Inc., Chadds Ford, PA (June 1987 to January 1988, June 1988 to April 1989)

Site H&S officer for two consecutive co-op periods while attending Drexel University. At the large, multi-faceted BROS Superfund site in New Jersey, was responsible for all air monitoring and air sampling, issued permits, hot work, confined space entry and line breaking. Also responsible for H&S compliance for both company and subcontract personnel on a project that ran 24 hours per day (DuPont Remmington Arms, Bridgeport, CT).

BROS Superfund Site, Bridgeport, NJ (June 1987 - January 1988) Site Safety Officer responsible for conducting daily exposure monitoring at project involving the demolition of a 100 unit tank farm, piping removal, drum consolidation and disposal, asbestos abatement, waste water treatment and demolition of five buildings. Performed daily inspections and health and safety reports, issued confined space entry permits and performed required air monitoring and sampling.

DAVE STRICKLAND - – SITE MANAGER/QC INSPECTOR

Education

BS, Industrial Engineering, Sieger Institute, 1972

Associate, Industrial Engineering, Evansville College, 1967

Registrations/Certifications

40-Hour HAZWOPER, and refresher

Productivity Management

Hazardous Materials and Environmental Management

Negative Air Applications

Emergency Rescue and Confined Space Entry

Industrial Ventilation and Exhaust Systems

RCRA Hazardous Waste Management

Hazardous Waste Regulations

Professional Awards/Honors

Award for Environmental Excellence, 1997; Army Corps of Engineers

Relevant Experience and Qualifications

Mr. Strickland is a Construction and Remediation Manager with 31 years of experience in industrial and civil engineering, general construction, and environmental remediation. He has successfully managed various multi-disciplined projects with a high degree of client satisfaction. His experience includes excavation, soils placement, pipeline trenching, landfill closure and liner installation, water treatment design, construction and plant operation, road construction, petroleum tank inspection and repair, dredging and sludge treatment, government procurement, quality control and project administration. Managed LTO/LTM of a groundwater treatment plant, dual-phase recovery system, and biosparge, low-flow injection system for the USACE.

JP-4 Product Recovery System
U.S. Army Corps of Engineers LTO; Shaw AFB, SC

Maintenance construction site manager for JP-4 Product Recovery System at Shaw AFB. The O&M of the OU-1 Remedial Action System consists of a network of 15 recovery wells. The groundwater is extracted and treated through the dual-phase treatment system, and recovered product is transferred to one of two aboveground storage tanks. Treated water is processed through the system and chemically treated for re-injection back into the groundwater. The review of system performance and accumulation of data used in optimization of the system is a pertinent part of the overall O&M duties. The project is ahead of schedule and has realized substantial cost savings, which are being reinvested for system optimization and enhancement.

Construction Inspector, Tank Repair And Containment
Air Force Center For Environmental Excellence; Ellsworth AFB, SD

Construction inspector responsible for overseeing daily construction procedures of various government contractors, assuring compliance as directed by the contracts officer. Responsible for tracking daily progress and schedules, assuring compliance to approved drawing and specifications, communications and response to the Contracting Officer's representative for project status updates, and coordination of weekly progress meetings. Duties include review and recommendations for acceptance of all project equipment and materials submitted as required by contract specification.

SS 12 Remedial Action for Construction of LNAPL Groundwater Recovery and Treatment System, U.S. Army Corps of Engineers; Seymour Johnson AFB, NC

Project engineer on construction of a concrete slab and pre-engineered steel process treatment building connected by a network of dual-phase recovery wells. Dual-phase in-line recovery pumps were installed for recovering both groundwater and product. A bio sparging system was installed as a natural attenuation process for treating freestanding product located close to the soils surface. Project oversight was required for the procurement and installation of the process treatment equipment. Engineering oversight

was required for the electrical distribution installation and final connection. Directional drilling operation for 12-in storm drain system under the runway area was required.

Water Treatment Plant Construction
Department of Energy; Denver, CO

Construction manager: Civil construction of a $3.5 million UMTRA. The scope of the project consisted of the construction of a groundwater extraction and injection system, and a 2.6-acre evaporation and treatment compound. The work included installation of piping, concrete foundation, steel tank installation, pre-engineered steel building construction, electrical instrumentation and controls, earthwork, liner installation, and installation of extraction and injection wells.

Response & PAC Division Contracts
U.S. Army Corps of Engineers, Omaha District; Ellsworth AFB, SD

Construction manager for $25 million project at Ellsworth Air Force Base. Four individual systems were constructed for process and treatment of JP-4 contaminated groundwater. In addition, eight solid waste landfills were graded, lined, capped and restored. Responsible for management and coordination of various subcontractors, construction operations personnel and engineering staff. The project was completed successfully and ahead of schedule. An overall project cost savings of $ 800,00 dollars was realized from various levels of value engineering and construction cost efficiencies. These savings were used to perform additional construction tasks and upgrade existing facilities. The project was a great success and was presented the 1997 Army Corps of Engineers Award for Environmental Excellence.

Various Construction Projects
USACE, PAC DIV., and Private Sector Clients
Port Deposit Naval Fire Training School, MD, East St. Louis, IL, Niagara Falls and Utica, NY, and Norfolk, VA

Project manager: responsible for management of various construction projects totaling over $50 million covering a variety of construction disciplines and a diverse client base. Projects included:

- **Maryland Department of Environment**: Wetlands delineation and mitigation working with the on the cleanup and restoration of Port Deposit Naval Fire Training School.
- **U.S. Army Corps of Engineers, Rapid Response Division East St. Louis, IL:** Lead abatement and restoration and cleanup of public residential housing.
- **U.S. Environmental Protection Agency,** Little Niagara River, Niagara Falls: Dredging, treatment, and disposal of DNAPL product.
- **Department of Energy**, Utica, NY: Construction of thermo incineration treatment system.
- **LantDiv Navy Program, Norfolk, VA**: Construction of a groundwater treatment plant for the Camp Allen project. This project was one the first applications of dynamic compaction methods for solid waste landfill consolidation.

Construction Manager, Missoula, MT

Responsible for hands-on operations of various projects, scopes, and locations for a variety of clients. Projects included civil construction of a $3.5 million UMTRA water treatment plant and a $16 million demolition/site restoration of a chemical weapons production facility.

Operations/Project Manager, and Senior Project Superintendent, Findlay, OH:

Work performed includes various capacities and locations, multiple projects, and a diverse government and private sector client base.

- **Operations Manager:** Responsible for all phases of operations management for USACE Rapid Response and PACDIV contracts. Responsible for assignment of support personnel and equipment prior to project mobilization; coordination and implementation of the mobilization process, including scheduling and organization of personnel, equipment, and subcontractors; client interaction; management of project accountants regarding procurement, inventory, estimated vs. actual costs; organized and maintained documentation of equipment maintenance schedules, machine hours, and inventory; organized and maintained personnel documentation and evaluations.
- **Project Manager:** Responsible for client interaction, interpretation of design and technical plans; coordination and direction of weekly client meetings involving cost tracking, justification of equipment and labor expenditures, and verification of field purchases; submittal of weekly project progress reports and schedule review, resource forecast and weekly planner; management of project accountants on revenue forecasting and project status report; detailed estimates for modifications and/or scope changes, including information retrieval and review, preparation of work scope; direct costs, and report generation for client approval.
- **Senior Project Superintendent**: Responsible for supervision of all aspects of on-site operations and administration; management of construction and equipment operation, management of engineering and technical staff; planning and directing work activities; schedule analysis and management of field accounting; implementation of work plan; checking for design accuracy; field design and automated generation of conceptual drawings.

Project Supervisor, Private Sector Contracting, Various Locations

Managed various private sector client based construction and remediation projects. This involved various construction disciplines including environmental emergency response, environmental remedial clean up, soils sampling, demolition, restoration and dewatering.

Industrial Engineer, Private Sector Engineering and Construction Supervision, Evansville, IN and Chicago, IL

Responsible for project cost control, concrete construction (manholes, catch basin, pump stations, concrete buildings, parking lots); steel construction (steel erection; fabrication, metal building erection), general construction (office, retail, warehouse,

excavation, compacting, plan-approved drawings), general engineering (surveying, underground tanks, site assessments), and computer graphic presentations.

Responsible for quality control and quality assurance, process control, drafting and shop drawing, industrial hygiene, instrumentation, mechanical/HVAC, air quality management, design, and methodology/production control.

Responsible for drafting/design, process control, training program, ventilation regulations; dust control, pressure measurement for static pressure, inclined manometer, diaphragm-magnetic gauge, pressure transducers, exhaust evaluation, emissions control, health and safety assurance, quality control, and quality assurance.

Project Supervisor, Various Clients, St. Louis, MO

Responsible for hands-on operations-related aspects of projects for numerous clients with a variety of scopes and locations. Projects included a technical services contract, all phases of an $8 million demolition/site restoration for a Superfund PRP, and a $1.4 million dewatering project.

IV. Outside Organizations

All vendors and subcontractors selected are agents of TN&A by way of contracts, subcontracts, and similar agreements. As such they are responsible through TN&A for maintaining QC procedures that are in compliance with Naval Facilities Engineering Command, EFA Northeast, Contract N62472-01-D-0807 specifications, contractual agreements made with TN&A, and this QC Plan. These agents will provide the TN&A QCM with all necessary quality control data, reports, and certifications as required for submittal upon request.

Surveillance of the subcontractor's operations is the responsibility of the TN&A QCM and the QC Inspector. Major discrepancies will be recorded and transmitted to the subcontractor with directions for correction and resolution. The QCM has authority to act directly with subcontractor representatives on routine QC issues. If a discrepancy is related to required work task that will be obscured or affected by subsequent activities, a resolution will be required before related tasks can proceed. Major discrepancies will be monitored and recorded.

TN&A will use a select few outside organizations on this project. The specific information for the designated subcontractor for each task will be provided as the selections are made. The types of subcontractors and their responsibilities are as follows.

- **Geotechnical Testing Laboratory – To Be Determined**
  Responsibilities: Soil sieve analysis for imported backfill and topsoil, in-the-field compaction testing for backfill materials.
- **Analytical Testing Laboratory –**
  - **Mitkem Corporation, Warwick, RI**

Responsibilities: Chemical testing and analysis for imported backfill and topsoil. Chemical Testing for Classification and Characterization of waste streams.

- **Construction Subcontractors**
  - Site Work Contractor
    - Maverick Construction Management Services, Inc., Auburn, MA
      Responsibilities: Site Preparation and construction of soil and drum staging areas, establishment of the Contractor Support area with portable office trailer and utilities, excavation, handling, re-packaging and sampling of any drums or containers encountered, soil excavation, staging and loadout, excavation backfill and grading, site restoration and seeding/mulching.

  - Offsite Transportation and Disposal – Capitol Environmental Services, Inc., Bloomfield, CT
    Responsibilities: Providing properly maintained, licensed and permitted over-the-highway trucks to transport materials to their ultimate properly licensed and permitted disposal location.

  - Electrical – To Be Determined
    Responsibilities: hook up temporary power to onsite office trailer (if required and available at the approved trailer location) .

V. Appointment Letters

Prior to beginning execution of the "work" and as part of the project specific QC Plan, letters will be written designating the CQC Manager, alternate CQC Manager and the Onsite QC Inspector. These letters will spell out their authority. Copies of the Appointment Letters are included as the next two pages.

15 November 2004

Mr. Chris Miller
T N & Associates, Inc.
6404 Falls of the Neuse Road
Raleigh, NC, 27615

RE: Appointment as Quality Control Manager for
Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI

Dear Mr. Miller:

This letter is to notify you of your appointment as Quality Control Manager (QCM) for the Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI.

As QCM, you will implement and manage the QC program. You will attend the coordination and mutual understanding meeting and conduct the QC meetings. Additionally, as QCM, you will perform the three phases of Quality Control, perform submittal approval, ensure that testing is performed as necessary, and provide any QC certifications and documentation required by the contract. You will be responsible for managing and coordinating the three phases of control and documentation performed by testing laboratory personnel and any other testing and inspection personnel required by this contract.

In the event that you discover a deficiency in construction quality, you will immediately bring the deficiency to the attention of the project manager. You will verify that the project manager directs that the deficiencies be corrected, and that rework items are completed as necessary. If it becomes necessary, you have the authority to issue a stop work order so that QC issues can be resolved.

If you have any questions, please contact me.

Sincerely,

John Fleissner
Corporate Quality Control Manager
T N & Associates, Inc.

15 November 2004

Mr. Joseph Clifford, P.E.
T N & Associates, Inc.
6404 Falls of the Neuse Road
Raleigh, NC, 27615

RE: Appointment as Quality Control Manager for
Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI

Dear Mr. Clifford:

This letter is to notify you of your appointment as Alternate Quality Control Manager (QCM) for Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI.

The Alternate QCM serves only in the designated QCM's absence for a maximum of two weeks at a time and for not more than a total of 30 days. As Alternate QCM, you will implement and manage the construction QC program in the QCM's absence. You will attend the coordination and mutual understanding meeting and, in the QCM's absence, conduct the QC meetings. Additionally, as Alternate QCM, you will perform the three phases of Quality Control, and in the QCM's absence, perform submittal approval, ensure that testing is performed as necessary, and provide any QC certifications and documentation required by the contract. In the QCM's absence, you will be responsible for managing and coordinating the three phases of control and documentation performed by the testing laboratory personnel and any other testing and inspection personnel required by this contract.

In the event that you discover a deficiency in construction quality, you will immediately bring the deficiency to the attention of the project manager. You will verify that the project manager directs that the deficiencies be corrected, and that rework items are completed as necessary. If it becomes necessary, you have the authority to issue a stop work order so that QC issues can be resolved.

If you have any questions, please contact me.

Sincerely,

John Fleissner
Corporate Quality Control Manager
T N & Associates, Inc.

15 November 2004

Mr. David Strickland
T N & Associates, Inc.
6404 Falls of the Neuse Road
Raleigh, NC, 27615

RE: Appointment as Quality Control Inspector for
Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI

Dear Mr. Strickland:

This letter is to notify you of your appointment as fulltime On-Site Quality Control Inspector for Installation Restoration (IR) Site 08 - NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI.

The QC Inspector serves as the eye's and ears of the CQC Manager and will be onsite full time when ever any work is being performed. You will assist the CQC Manager with implementation and management of the construction QC program. You will attend the project specific quality control meetings and, in the QCM's absence, conduct the QC meetings. Additionally, as the On-Site QC Inspector, you will perform the three phases of Quality Control, and in the QCM's absence, perform submittal approval, ensure that testing is performed as necessary, and provide any QC certifications and documentation required by the contract. In the QCM's absence, you will be responsible for managing and coordinating the three phases of control and documentation performed by the testing laboratory personnel and any other testing and inspection personnel required by this contract.

In the event that you discover a deficiency in construction quality, you will immediately bring the deficiency to the attention of the project manager. You will verify that the project manager directs that the deficiencies be corrected, and that rework items are completed as necessary. If it becomes necessary, you have the authority to issue a stop work order so that QC issues can be resolved.

If you have any questions, please contact me.

Sincerely,

John Fleissner
Corporate Quality Control Manager
T N & ASSOCIATES, INC.

VI. Submittal Procedures and Initial Submittal Register

The submittal reviewer for this project will be the QCM. In addition to the QCM, or in the event that the QCM is unable to perform the duties of submittal reviewer, the Alternate QCM will act as submittal reviewer. After review by the QCM, submittals will either be approved or returned to the preparer for revision. An executed Transmittal Form will accompany each submittal. The approval status will be verified with the QCM's signature and date affixed to the Transmittal Form. Plans, testing results and certifications will be submitted as required by the appropriate specifications. Five copies of each submittal will be submitted to NAVSTANPT, 5 copies will be submitted to EFANE and 2 copies will be submitted to ROICC.

The submittals for the project will be recorded in a Submittal Register prepared at the beginning of the project. The Submittal Register for Contract N62472-01-D-0807, Delivery Order 0006 is included in Appendix A. The submittals expected for the project include the following primary Submittal Descriptions (SD).

SD-01 Preconstruction Submittals
SD-02 Shop Drawings
SD-03 Product Data
SD-04 Sample
SD-05 Design Data
SD-06 Test Reports
SD-07 Certificates
SD-08 Manufacturer’s Instructions
SD-10 Operation and Maintenance Data
SD-11 Closeout Submittals

Note that there is no SD-09 designated with this contract. Each of the primary Submittal Descriptions are divided into more detailed submittal requirements relative to specific Specification Section paragraphs. Contract requirement items such as Daily Inspection Reports (SD-06), Contractor Production Reports, and Contractor Quality Control Reports will be submitted ongoing throughout the contract period.

VII. Testing and Testing Laboratory Information

The testing required for the Installation Restoration (IR) Site 08 - NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, RI. is fairly limited due to the scope of the work being limited excavation/backfill as compared to a construction project. The anticipated testing for the NUSC Disposal Area Project includes chemical testing of imported fill and topsoil to ensure that no contaminated materials are brought onto the site. Representative samples of the contents of any drums removed and handled along with any contaminated soils will have to be collected and analyzed for proper offsite disposal and/or recycling classification.

A testing log will be prepared prior to the start of the project, with a testing schedule, and places for recording test data. All testing will be in accordance with the applicable sections of the specifications. Additional details for the planned testing and sampling of materials and demolition debris can be found in the "Work Plan", Section 4 – Sampling and Analysis as well as the formal "*Sampling and Analysis Plan*", located in Appendix E of the Work Plan..

Testing Laboratories

Laboratory services for the project will be used to determine the quality and acceptability of the imported backfill and topsoil and to classify the demolition debris, concrete and asphalt for proper disposal offsite disposal and/or recycling. The laboratories for the project will be accredited by the appropriate Accreditation Authority for the analyses being performed.

The Laboratory that will perform the required chemical analysis on the representative samples of the waste streams to be shipped offsite, as well as the general fill and topsoil will be Mitkem Corporation located nearby in Warwick, Rhode Island. Mitkem Corporation has been approved for use by the Navy Installation Restoration (IR) Quality Assurance (QA) Program administered by NFESC. A copy of their current approval letter is included in Appendix B. Mitkem Corp will provide courier service to pick up samples at the site and will also provide all of the pre-cleaned and certified jars and sample containers necessary.

VIII. Procedures to Complete Rework Items

The QCM shall maintain a list of work that does not comply with the Contract, identifying what items need to be reworked, the date the item was discovered, and the date it will be corrected by. There is no requirement to report rework items that are found and corrected on the same day. Rework items will be noted on a “Rework Items List” that includes the date that the rework item was discovered, and when the rework is scheduled to be completed. The QCM will verify that rework items are completed as scheduled, and will note when items are corrected on the "Rework Items List." An example "Rework Items List" is included in Appendix D. No work will be built on top of items requiring rework. If necessary, the QCM will halt other work until rework items are completed.

IX. Documentation Procedures

Various forms of documentation will be generated and completed during this project. The documentation will consist of Contractor Quality Control Reports, Contractor Production Reports, Quality Control Summary Reports, Preparatory Phase Checklists, Initial Phase Checklists, Rework Items List, Transmittal Forms, Submittal Registers, Waste Management Plan and Log, field equipment inspections, air sampling results, analytical sample results and others as required by the contract and the direction of the Contracting Officer.

Work will be documented on the Contractor Production Report and Contractor Quality Control Report. The Contractor Production Report and Contractor Quality Control Report will only be completed for those days when actual on-site work is performed. Sample copies of the Contractor Production Report and Contractor Quality Control Report can be found in Appendix D. Each submittal requiring government approval will be complete and in sufficient detail to allow ready determination of compliance with contract requirements.

X. List of Definable Features

A definable feature of work is a task that is separate and distinct from other tasks and has separate control requirements. The definable features of work for this project are as follows:

1. Submittal preparation and project set-up

2. Mobilization and Site Preparation
    - Silt Fencing and/or hay bales and erosion control
    - Erection of the required signage and postings

- Clearing and grubbing,
- Utility Location Markouts and Navy Dig Safe Permit completion and submission
- Set-up and establishment of soils and drum staging areas

3. Drum and Metal Debris Areas Excavation
    - Work Area Demarcation including excavation limits
    - Excavation of overlying soils (set aside for reuse)
    - Excavation, removal, handling, repackaging and sampling of drums
    - Excavation, removal and staging of heavily contaminated soils

4. Backfill
    - Re-placement of excavated reusable soils
    - Installation of a separation geotextile (non-sloped areas)
    - Placement of clean backfill (90% compaction required)

5. Restoration
    - Placement of certified clean topsoil
    - Seeding, fertilizing and mulching

6. Offsite Transportation and Disposal
    - Handling and Staging Drums, Debris and Soils
    - Packaging Drums
    - Loading-out Debris and Soils into permitted/licensed hauling vehicles
    - Loading-out repackaged drums into permitted/licensed hauling vehicles
    - Reception and disposal/destruction of contaminated materials and containers at licensed and permitted facilities.

7. Demobilization and Project Closeout
    - Removal of personnel, equipment and temporary facilities
    - Removal of temporary drum and soils staging areas
    - Removal of signage and postings
    - Punch list
    - Preparation and submission of Project Closeout Report

XI. Procedures for Performing the Three Phases of Control Using a Quality Control Checklist

The three phases of control will adequately cover both on-site and off-site work and will include the following:

- **Preparatory Phase:**
  1. Review of project specifications.
  2. Verify that the appropriate submittals have been submitted.
  3. Review the testing plan as appropriate.
  4. Examine the work area to insure that the required preliminary work is complete.
  5. Examine the required materials and equipment to insure that they are on hand.
  6. Discuss construction methods, tolerances, and workmanship standards with project personnel identifying potential problems and solutions.
  7. Review safety and hazard analysis for the activity to insure that the applicable safety requirements are met.
  8. Coordinate all activities with NUWC Operations personnel.

- **Initial Phase:**
  1. Establish the quality of workmanship required.
  2. Resolve conflicts.
  3. Ensure that applicable testing is performed.
  4. Check procedures for compliance with the site-specific safety plan and the USACE EM-385.
  5. Verify adherence to the Contract and NUWC requirements.

- **Follow-up Phase:**
  1. Ensure that work is in compliance with contract requirements.
  2. Maintain the quality of workmanship required.
  3. Ensure that testing is performed.
  4. Ensure that rework items are being corrected.
  5. Perform safety inspections.

Since the definable features of work generally follow closely on each other, individual formal QC meetings will not necessarily be held for each phase of each feature of work. A QC meeting will be held prior to the start of construction, and as needed when there is a significant change in the nature of the work from that discussed in the preconstruction QC meeting.

XII. Personnel Matrix

The QCM (Chris Miller) or Alternate QCM (Joe Clifford) will approve QC submittals and will perform and document the three phases of quality control. The QCM, Alternate QCM or QC Inspector will collect samples as necessary for testing and will deliver them to the laboratory for testing. Testing will be documented on the daily QC reports and in the project closure report.

XIII. Procedures for Completion of Inspection

The QCM, Alternate QCM or the QC Inspector will be on site at any time that work is performed, and will inspect the work as it progresses and verify in person that the work meets the plans and specifications for the project. The QCM will verify that rework items are completed as scheduled, and will note when items are corrected on the Rework Items List. No work will be built on top of items requiring rework, and if necessary, the QCM will halt other work until rework items are completed.

XIV. Emergency Contacts

In the case of an onsite emergency, the following persons are to be contacted:

Project Manager	**Cell:**	**(610) 505-9315**
(Joe Clifford)	Office:	(610) 431-9584
CQC Manager	**Cell:**	**(609) 709-7395**
(Chris Miller)	Office:	(609) 296-0952
On-Site QC Inspector/SSHO	Cell:	**(803) 938-3454**
(Dave Strickland)	Office:	TBD
Corporate Safety and Health Manager	Office:	(414) 607-6779
(William Fink, CIH, CSP, CHMM)	Pager:	(888) 662-5705

Local Emergency Contacts

The local emergency contacts are:

- Emergency requiring Police, Fire or Ambulance **911**
- Newport Hospital (401) 846-6400
- National Response Center Oil/Chemical Spills (800) 424-8802
- Poison Information Center (800) 815-8855
- Chemtrec (800) 424-9300

Incident Reporting Call List

If you have an incident which involves:

- Spill
- Release
- Fire
- Explosion
- Personal injury (more than first aid)
- Highway accident
- Non-TN&A personnel
- Coverage or publicity
- Possible insurance company action
- Damage to TN&A property
- Regulatory agency notice of violation

IMMEDIATELY CONTACT one of the following personnel starting at the top:

Name	Work Tel. No.	Home Tel. No.	Pager/Mobile No.
1. Chris Miller	(609) 296-0952	(609) 296-3529	(609) 709-7395
2. Joe Clifford	(610) 431-9584	(610) 431-9584	(610) 505-9315
3. Dave Strickland	TBD	N/A	(803) 938-3454
4. William Fink	(414) 607-6779	(414) 476-8379	(888) 662-5705

If the incident is reportable to outside regulatory agencies, notify the individuals listed in items #1 or #2 in the table above.

The primary client contact is:	Martin Kawa – ROICC/ET Naval Station Newport, Newport, RI (401) 841-1569
The alternate client contact is:	Mr. Robert Krivinskas – Project Manager Naval Facilities Engineering Command (NAVFAC) Naval Station Newport, Newport, RI (401) 841-1761

Appendix A

Submittal Register

SUBMITTAL REGISTER

CONTRACT NO. N62472-01-D-0807, Delivery Order No. 0006

IR SITE 08 - NUSC DISPSOAL AREA SOIL REMOVAL ACTION, NAVAL UNDERSEA WARFARE CENTER, NEWPORT, RI

CONTRACTOR: TN & Associates, Inc.

ACTIVITY NO	TRANSMITTAL NO	SPEC SECTION	DESCRIPTION ITEM SUBMITTED	PARAGRAPH NO	CLASSIFICATION	GOVT REVIEWER	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RECD FROM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTHR DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RECD FROM OTHER REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(I)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
			SD-01 Preconstruction submittals															
		C	Draft Work Plan	C.6	GROICC		30 days after Contract Award											Internal Draft Submitted to Navy before Regulators
		C	Revised Internal Draft Work Plan	C.6	GROICC		30 days after Contract Award											Revised Internal Draft Submitted to Navy and USEPA and RIDEM
		C	Responses to EPA and RIDEM Comments on Draft Work Plan	C.6	GROICC													
		C	Final Work Plan	C.6	GROICC													Address Regulators Comments in Final Work Plan
		C	List of contact personnel	C.6	GROICC													Included in QC Plan
		C	Schedule	C.6	GROICC													Submit Base Construction Schedule with Work Plan
		C	Submittal Register	C.6	GROICC													Submit with QC Plan
			Submittal Register Updates	C.6	GROICC		Weekly or as needed											Submit Weekly or as needed
			Certificate Of Insurance	C.6	FIO													Submitted with Bid
			Surety Bonds (payment and performance)	C.6	FIO													Bonds submitted week of 11/1/04
		C	Quality Control Plan	C.6	GROICC		with Work Plan											Submit with Work Plan
		C	QC Training Certs	C.6	FIO		with QC Plan											Submit with QC Plan
		C	Health and Safety Plan	C.6	GROICC		with Work Plan											Submit with Work Plan
		C	Activity Hazard Analysis (AHA)	C.6	GROICC		with SSHP											Submit with HASP
		C	Medical Surveillance Records	C.6	FIO		Prior to Mobe											Submit Prior to Site Work
		C	Training Records - OSHA Hazwoper	C.6	FIO		Prior to Mobe											Submit Prior to Site Work
		C	Certificates of Supervisory Training	C.6	FIO		Prior to Mobe											Submit Prior to Site Work
		C	Soil Erosion and Sediment Control Plan	C.6	GROICC		with Work Plan											Submit with Work Plan
		C	Storm Water Pollution Prevention Plan	C.6	GROICC													Submit with Work Plan
		C	Waste Management Plan	C.6	GROICC													
		C	Waste Transporter(s) Information	C.6	GROICC		Prior to Mobe											License, Permits, Violation Record, Safety Rating (if available)
		C	Disposal Facitilites Information	C.6	GROICC		Prior to Mobe											Location, License, Permits, Violation Record, Safety Rating (if available)
			SD-02 Submittals During Construction	C.6														
		C	***Waste Disposal Documentation***	C.6	GROICC													
		C	Draft Shipping Documents for Review	C.6	GROICC		**5 days prior to shipping**											Submit draft manifests and Bills of Lading for review and approval prior to shipment
		C	Waste Disposal Documentation - Shipping Docs.	C.6	FIO		**10 days after shipment**											Submit returned manifests (from disposal facility) 10 days after receipt of waste.
		C	Waste Disposal Documentation - Weight Tickets	C.6	FIO		**10 days after shipment**											Submit weight tickets from disposal facility 10 days afte rreceipt of waste
		C	Waste Disposal Documentation - Certificates of Treatment/Disposal	C.6	FIO		**10 days after shipment**											Submit Certificates of Treatment/disposal from disposal facility 10 days from treatment or disposal of waste
		C	Daily Summary Reports - Production Reports	C.6	FIO		**Daily**											Contractor Production reports to be submitted by 10am the following day via email
		C	Daily Quality Control Reports	C.6	FIO		**Daily**											Daily QC Reports to be submitted by 10am the following day that QC Testing was performed

SUBMITTAL REGISTER

CONTRACT NO. N62472-01-D-0807, Delivery Order No. 0006

IR SITE 08 - NUSC DISPSOAL AREA SOIL REMOVAL ACTION, NAVAL UNDERSEA WARFARE CENTER, NEWPORT, RI

CONTRACTOR: TN & Associates, Inc.

ACTIVITY NO	TRANSMITTAL NO	SPEC SECTION	DESCRIPTION ITEM SUBMITTED	PARAGRAPH NO	CLASSIFICATION	GOVT REVIEW AR/EW	CONTRACTOR SCHEDULE DATES			CONTRACTOR ACTION			APPROVING AUTHORITY				MAILED TO CONTR/ DATE RECD FROM APPR AUTH	REMARKS
							SUBMIT	APPROVAL NEEDED BY	MATERIAL NEEDED BY	ACTION CODE	DATE OF ACTION	DATE FWD TO APPR AUTHR DATE RCD FROM CONTR	DATE FWD TO OTHER REVIEWER	DATE RECD FROM OTHER REVIEWER	ACTION CODE	DATE OF ACTION		
(a)	(b)	(c)	(d)	(e)	(f)		(g)	(h)	(I)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
		C	Construction Progress Photographs	C.6	FIO		**Daily**											Progress Photographs to be submitted with Daily Production Reports via email
		C	Analytical Reports	C.3	FIO		**5 days after collection**											Analytical reports for samples collected to be submited to the CO w/5 days from date of collection
		C	Certified Payrolls	C.2	FIO		Weekly											Certified Payrolls as per Davis Bacon Wage Rates submitted weekly
			SD-05 Design Data															
		C	Fill and backfill - Geophysical Testing Results	C.3	GROICC													Geophysical Testing to certify compliance with Specification requirements - 1 test per source
		C	Fill and backfill - Chemical Testing Results	C.3	GROICC													Chemical Testing Results to Certify proposed material is "clean" - 1 test per source
		C	Topsoil - Geophysical Testing Results	C.5	GROICC													Geophysical Testing to certify compliance with Specification requirements - 1 test per source
		C	Topsoil - Chemcial Testing Results	C.5	GROICC													Chemical Testing Results to Certify proposed material is "clean" - 1 test per source
		C	Emergency and Hazardous Chemical Inventory Forms - MSDS's	C.6														Must be onsite with materials
		C	**Project Close-Out Report**	C.6	GROICC													
		C	Internal Draft Project Close-Out Report for Navy Review	C.6	GROICC													
		C	Revised Draft Project Close-Out Report (for Navy and Regulatory Review)	C.6	GROICC													
		C	Final Project Close-Out Report (with Navy and Regulator Comments addressed)	C.6	GROICC													
		C	As-builts	C.6														
		C	Laboratory Electronic Deliverables	C.6	FIO		10 days after											

Appendix B

Navy Approval letter for Mitkem Corporation

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING SERVICE CENTER
1100 23RD AVE
PORT HUENEME CA 93043-4370

IN REPLY REFER TO:

NFESC 413
May 5, 2005

Ms. Karen Gavitt
QA/QC Director
Mitkem Corporation
175 Metro Center Boulevard
Warwick, RI 02886

Dear Ms. Gavitt,

This correspondence addresses the status of Mitkem Corporation of Warwick, RI in the Navy Installation Restoration (IR) Quality Assurance (QA) Program as administered by the Naval Facilities Engineering Service Center (NFESC).

Your laboratory is accepted to perform sample analysis for the methods listed in Table 1. The period of acceptance expires August 31, 2005. This acceptance does not guarantee the delivery of any analytical samples. Acceptance is facility specific and can not be transferred to an affiliated or subcontract laboratory.

The Navy's review included a review of the laboratory's QA manual, selected standard operating procedures (SOPs) and SOP master list, list of major analytical instrumentation, performance test (PT) results and Army onsite audit documentation[1].

The Navy reserves the right to conduct additional laboratory assessments or to suspend or revoke acceptance status for any or all of the listed parameters if deemed necessary.

Table 1

METHOD	PARAMETER	MATRIX
9058/300 Series	Anions: Chloride, Fluoride, Sulfate, Nitrate, Nitrite, and Ortho-phosphate	Water
9012A	Cyanide	Water/Solid
1664A	Oil and Grease	Water
8260B	Volatile Organic Compounds	Water/Solid
8270C	Semivolatile Organic Compounds	Water/Solid
8151A	Herbicides	Water/Solid

[1] The State of New York conducted an on-site assessment under the National Environmental Laboratory Accreditation Program (NELAP) on April 3, 2003.

NFESC 413
May 5, 2005

8015B	Total Petroleum Hydrocarbon (GRO/DRO)	Water/Solid
8021	Volatile Organics (BTEX)	Water/Solid
8081A	Organochlorine Pesticides	Water/Solid
8082	Polychlorinated Biphenyls (PCBs)	Water/Solid
6010B/7000A	TAL Metals: Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, and Zinc	Water/Solid

Acceptance for use for parameters not identified on the table will be determined by Navy project personnel.

The laboratory should notify NFESC if there are parameters not presented on Table 1 that the laboratory expects to run on a routine basis in support of Navy installation restoration projects. In these circumstances the laboratory's capability to run the tests will be reviewed and the table will be modified accordingly.

Questions concerning the information provided should be directed to the NFESC IR QA Program coordinator, Ms. Patricia Moreno at (805) 982-1659, or via email at morenop@nfesc.navy.mil.

Sincerely,

for Robert J. Kratzke
Supervisor, Consultation/Information
Management Branch

Appendix C

USACE CQC Training Certificates

U.S. ARMY CORPS OF ENGINEERS

PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

DAVID STRICKLAND

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at Charleston, SC (Location) By Charleston, SC (Instructional District) 20 April 2004 (Date)

Walter C. McKinney
Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Gary L. Anderson
Chief, USACE Professional Development Support Center

PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

Christopher G. Miller

Sevenson Environmental Services, Inc.

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at SWNJ Res Ofc (Location) By Philadelphia (Instructional District) 4/11/00 (Date)

Mr. Joseph Hoag, (856) 241-1671
Facilitator

Chief, USACE Professional Development Support Center

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Appendix D

Rework Items List (example)

Contractor Production Report

Contractor Quality Control Report

3 - Phase QC Checklists

Rework Item List

REWORK ITEMS LIST

Contract No. and Title: N62472-01-D-0807, DO No.0006 Installation Restoration (IR) Site 08 – NUSC Disposal Area, Naval Undersea Warfare Center, Middletown, RI

Contractor: TN & Associates, Inc.

NUMBER	DATE IDENTIFIED	DESCRIPTION	CONTRACT REQUIREMENT (Spec. Section and Par. No., Drawing No. and Detail No., etc.)	ACTION TAKEN BY QC MANAGER	RESOLUTION	DATE COMPLETED

Contractor Production Report

CONTRACTOR PRODUCTION REPORT

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE: Enter Date (DD/MMM/YY)

CONTRACT NO	TITLE AND LOCATION	REPORT NO
N62472-01-D-0807, Delivery Order No.0006	Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, RI	Enter Report # Here

CONTRACTOR	SUPERINTENDENT
TN & Associates, Inc.	Jeremiah Johnson

AM WEATHER	PM WEATHER	MAX TEMP (F)	MIN TEMP (F)
Enter AM Weather Data Here	Enter PM Weather Data Here	Enter Max Temp Here	Enter Min Temp Here

WORK PERFORMED TODAY

Schedule Activity No.	WORK LOCATION AND DESCRIPTION	EMPLOYER	NUMBER	TRADE	HRS

Job Safety

WAS A JOB SAFETY MEETING HELD THIS DATE? (If YES attach copy of the meeting minutes)	☐ YES	☐ NO
WERE THERE ANY LOST TIME ACCIDENTS THIS DATE? (If YES attach copy of completed OSHA report)	☐ YES	☐ NO
WAS CRANE/MANLIFT/TRENCHING/SCAFFOLD/HV ELEC/HIGH WORK/ HAZMAT WORK DONE? (If YES attach statement or checklist showing inspection performed.)	☐ YES	☐ NO
WAS HAZARDOUS MATERIAL/WASTE RELEASED INTO THE ENVIRONMENT? (If YES attach description of incident and proposed action.)	☐ YES	☐ NO

TOTAL WORK HOURS ON JOB SITE, THIS DATE, INCL CON'T SHEETS	
CUMULATIVE TOTAL OF WORK HOURS FROM PREVIOUS REPORT	
TOTAL WORK HOURS FROM START OF CONSTRUCTION	

Schedule Activity No.	LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED ☐ SAFETY REQUIREMENTS HAVE BEEN MET.

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB (INDICATE SCHEDULE ACTIVITY NUMBER)

Schedule Activity No.	Submittal #	Description of Equipment/Material Received

CONSTRUCTION AND PLANT EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED AND SCHEDULE ACTIVITY NUMBER.

Schedule Activity No.	Owner	Description of Construction Equipment Used Today (incl Make and Model)	Hours Used
Schedule Activity No.	REMARKS		
Schedule Activity No.	REMARKS		

CONTRACTOR/SUPERINTENDENT Date

Chris Miller Jeremiah Johnson

CONTRACTOR/SUPERINTENDENT Date

Chris Miller Jeremiah Johnson

CONTRACTOR/SUPERINTENDENT Date

Chris Miller Jeremiah Johnson

CONTRACTOR PRODUCTION REPORT (CONTINUATION SHEET)		DATE
CONTRACT NO N62472-01-D-0807, Delivery Order No.0006	TITLE AND LOCATION Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, RI	REPORT NO

WORK PERFORMED TODAY

Schedule Activity No.	WORK LOCATION AND DESCRIPTION	EMPLOYER	NUMBER	TRADE	HRS

Schedule Activity No.	LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB (INDICATE SCHEDULE ACTIVITY NUMBER)

Schedule Activity No.	Submittal #	Description of Equipment/Material Received

CONSTRUCTION AND PLANT EQUIPMENT ON JOB SITE TODAY. INDICATE HOURS USED AND SCHEDULE ACTIVITY NUMBER.

Schedule Activity No.	Owner	Description of Construction Equipment Used Today (incl Make and Model)	Hours Used

Schedule Activity No.	REMARKS

INCLUDE ALL PERSONNEL WORK HOURS IN THE WORK PERFORMED SECTION ON THIS SHEET
INTO THE FRONT CONTRACTOR PRODUCTION REPORT

Contractor Quality Control Report

CONTRACTOR QUALITY CONTROL REPORT

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE: Enter (DD/MMM/YY)

REPORT NO: Enter Rpt # Here

PHASE	CONTRACT NO	CONTRACT TITLE
	N62472-01-D-0807, DO No.0006	Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, RI

PREPARATORY

WAS PREPARATORY PHASE WORK PREFORMED TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL PREPARATORY PHASE CHECKLIST.

Schedule Activity No.	Definable Feature of Work	Index #

INITIAL

WAS INITIAL PHASE WORK PREFORMED TODAY? YES ☐ NO ☐

IF YES, FILL OUT AND ATTACH SUPPLEMENTAL INITIAL PHASE CHECKLIST.

Schedule Activity No.	Definable Feature of Work	Index #

FOLLOW UP

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

WORK COMPLIES WITH SAFETY REQUIREMENTS? YES ☐ NO ☐

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

Schedule Activity No.	Description

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

Schedule Activity No.	Description

REMARKS (Also Explain Any Follow-Up Phase Checklist Item From Above That Was Answered "NO"), Manuf. Rep On-Site, etc.

Schedule Activity No.	Description

On behalf of the contractor, I certify that this report is complete and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

AUTHORIZED QC MANAGER AT SITE DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

Schedule Activity No.	Description

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

(CONTINUATION SHEET)
(ATTACH ADDITIONAL SHEETS IF NECESSARY)

DATE: Date (DD/MMM/YY)

REPORT NO.: Enter Rpt # Here

PHASE	CONTRACT NO	CONTRACT TITLE
	N62472-01-D-0807, DO No.0006	Installation Restoration (IR) Site 08 – NUSC Disposal Area Soil Removal Action, Naval Undersea Warfare Center, Middletown, RI

WORK COMPLIES WITH CONTRACT AS APPROVED DURING INITIAL PHASE? YES ☐ NO ☐

WORK COMPLIES WITH SAFETY REQUIREMENTS? YES ☐ NO ☐

FOLLOW-UP

Schedule Activity No.	Description of Work, Testing Performed & By Whom, Definable Feature of Work, Specification Section, Location and List of Personnel Present

REMARKS (Also Explain Any Checklist Item From Above That Was Answered "NO"), Manuf. Rep. On-Site, etc.

Schedule Activity No.	Description

3 - Phase QC Checklist

PREPARATORY PHASE CHECKLIST

(CONTINUED ON SECOND PAGE)

SPEC SECTION	DATE
Enter Spec Section # Here	Enter Date (DD/MMM/YY)

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
N62472-01-D-0807, Delivery Order No.0006	Enter DFOW Here	Enter Sched Act ID Here	Enter Index# Here

PERSONNEL

GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

SUBMITTALS

REVIEW SUBMITTALS AND/OR SUBMITTAL REGISTER. HAVE ALL SUBMITTALS BEEN APPROVED? YES ☐ NO ☐

IF NO, WHAT ITEMS HAVE NOT BEEN SUBMITTED? _____

ARE ALL MATERIALS ON HAND? YES ☐ NO ☐

IF NO, WHAT ITEMS ARE MISSING? _____

CHECK APPROVED SUBMITTALS AGAINST DELIVERED MATERIAL. (THIS SHOULD BE DONE AS MATERIAL ARRIVES.)

COMMENTS: _____

MATERIALS

ARE MATERIALS STORED PROPERLY? YES ☐ NO ☐

IF NO, WHAT ACTION IS TAKEN? _____

SPECIFICATIONS

REVIEW EACH PARAGRAPH OF SPECIFICATIONS. _____

DISCUSS PROCEDURE FOR ACCOMPLISHING THE WORK. _____

CLARIFY ANY DIFFERENCES. _____

PRELIM. WORK & PERMITS

ENSURE PRELIMINARY WORK IS CORRECT AND PERMITS ARE ON FILE.

IF NOT, WHAT ACTION IS TAKEN? _____

TESTING	IDENTIFY TEST TO BE PERFORMED, FREQUENCY, AND BY WHOM.
	WHEN REQUIRED?
	WHERE REQUIRED?
	REVIEW TESTING PLAN.
	HAS TEST FACILITIES BEEN APPROVED?
SAFETY	ACTIVITY HAZARD ANALYSIS APPROVED? YES ☐ NO ☐
	REVIEW APPLICABLE PORTION OF EM 385-1-1.
MEETING COMMENTS	NAVY/ROICC COMMENTS DURING MEETING.
OTHER ITEMS OR REMARKS	OTHER ITEMS OR REMARKS:

QC MANAGER/QC INSPECTOR DATE

INITIAL PHASE CHECKLIST

SPEC SECTION	DATE
Enter Spec Section # Here	Enter Date (DD/MMM/YY)

CONTRACT NO	DEFINABLE FEATURE OF WORK	SCHEDULE ACT NO.	INDEX #
N62472-01-D-0807, Delivery Order No.0006	Enter DFOW Here	Enter Sched Act ID Here	Enter Index# Here

PERSONNEL

GOVERNMENT REP NOTIFIED _____ HOURS IN ADVANCE: YES ☐ NO ☐

NAME	POSITION	COMPANY/GOVERNMENT

COMPLIANCE

IDENTIFIY FULL COMPLIANCE WITH PROCEDURES IDENTIFIED AT PREPARATORY. COORDINATE PLANS, SPECIFICATIONS, AND SUBMITTALS.

COMMENTS: _____

PRELIM WORK

ENSURE PRELIMINARY WORK IS COMPLETE AND CORRECT. IF NOT, WHAT ACTION IS TAKEN?

WORKMANSHIP

ESTABLISH LEVEL OF WORKMANSHIP.

WHERE IS WORK LOCATED? _____

IS SAMPLE PANEL REQUIRED? YES ☐ NO ☐

WILL THE INIITAL WORK BE CONSIDERED AS A SAMPLE? YES ☐ NO ☐

(IF YES, MAINTAIN IN PRESENT CONDITION AS LONG AS POSSIBLE AND DESCRIBE LOCATION OF SAMPLE) _____

RESOLUTION

RESOLVE ANY DIFFERENCES.

COMMENTS: _____

SAFETY

REVIEW JOB CONDITIONS USING EM 385-1-1 AND JOB HAZARD ANALYSIS

COMMENTS: _____

OTHER

OTHER ITEMS OR REMARKS

QC MANAGER/QC INSPECTOR	DATE